

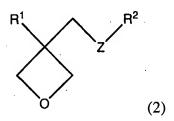
This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Previously presented) A radiation curable composition comprising relative to the total weight of the composition
 - A 0-25 wt.% of a cationically curable component having a linking aliphatic ester group
 - B 10-85 wt.% of an epoxy group containing component other than A
 - C 1-50 wt.% of an oxetane group containing component
 - D 1-25 wt.% of a multifunctional acrylate
 - E a radical photoinitiator
 - F a cationic photoinitiator.
- (Previously presented) The radiation curable composition according to claim
 the wherein component A comprises two cyclohexenoxide groups.
- (Previously presented) The radiation curable composition according to claim1, wherein the amount of component A is between 0 and 15 wt%.
- 4. (Previously presented) The radiation curable composition according to claim1, wherein component B comprises a glycidyl ether group.
- (Previously presented) The radiation curable composition according to claim
 wherein the composition comprises relative to the total weight of the composition 30-75 wt.% of component B having a glycidyl ether group, 10-25 wt% of component C and
 wt.% of the multifunctional acrylate compound D.
- 6. (Previously presented) The resin composition according to claim 4, wherein the molar

THIES et al Appl. No. 10/623,153 September 11, 2006

ratio of oxetane to glycidyl ether is between 0.1 and 1.5.

7. (Previously presented) The radiation curable component according to claim 1, wherein the oxetane is chosen from the group consisting of components defined by formula 2,



wherein R^1 is a C1-C4 alkyl group, Z = Oxygen and $R^2 = H$, a C1-C8 alkyl group or a phenyl group; 3-ethyl-3-hydroxymethyloxetane, (3-ethyl-3-oxetanylmethoxy)methylbenzene, (3-ethyl-3-oxetanylmethoxy)benzene, 2-ethylhexyl (3-ethyl-3-oxetanylmethyl) ether, 1 ,4-bis[(3-ethyl-3-oxetanylmethoxy)methyl]benzene, 1,2-bis[(3-ethyl-3-oxetanylmethoxy)methyl]ethane, 1,3-bis[(3-ethyl-3-oxetanylmethyl) ether and bis(3-ethyl-3-oxetanylmethyl) ether.

- 8. (Previously presented) The radiation curable composition according to claim4, wherein the composition contains a glycidyl ether of hydrogenated bisphenol A.
- (Previously presented) The radiation curable composition according to claim
 wherein the composition after full cure with actinic radiation and 60 min UV
 postcure has at least one of the following properties
 - (i) a flexural modulus in the range of 1000 to 100000 MPa;
 - (ii) an average elongation at break of at least 4%; and
 - (iii) a tensile strength of at least 25 MPa.
- 10. (Currently Amended) The radiation curable composition according to claim

- 1, wherein a photo-fabricated article, obtained by repeating the steps of forming a layer of the composition and selectively irradiating the layer of the composition with actinic radiation, followed by postcure during 60 minutes in a postcure apparatus and subsequent conditioning of the article during 48 hours at a temperature of 20 °C and a relative humidity of 80% RH, has at least one of the following properties
- (i) a flexural modulus in the range of 500 to 10000 MPa;
- (ii) an average elongation at break of at least 3%; and / or
- (iii) a tensile strength strength of at least 25 MPa.
- 11. (Previously presented) The resin composition according to claim 1, wherein the amount of components having linking aliphatic ester groups is less than 100 meq of ester links/100 g of composition.
- 12. (Previously presented) The resin composition according to claim 1, wherein the amount of components having linking aliphatic ester groups is less than 25 meq of ester links/100 g of composition.
- 13. (Previously presented) The resin composition according to claim 4, wherein the weight ratio of glycidyl ethers to epoxy-group containing components that have linking aliphatic ester groups is larger than 1.5.
- 14. (Previously presented) A radiation curable composition comprising relative to the total weight of the composition
 - A a cationically curable component having a linking aliphatic ester group
 - B 10-85 wt.% of an epoxy group containing component other than A
 - C 1-50 wt.% of an oxetane group containing component
 - D 1-25 wt.% of a multifunctional acrylate
 - E a radical photoinitiator
 - F a cationic photoinitiator,

wherein the amount of components having linking aliphatic ester groups is less than 100

THIES et al Appl. No. 10/623,153 September 11, 2006

meq of ester links/100 g of composition.

- 15. (Cancelled).
- 16. (Cancelled).
- 17. (Currently Amended) A radiation curable composition comprising relative to the total weight of the composition
 - A 0-25 wt.% of a component having a linking ester group and two cyclohexeneoxide groups
 - B 10-85 wt.% of an epoxy group containing component other than A
 - C 1-29 wt.% of an oxetane group containing component
 - D 1-25 wt.% of a multifunctional acrylate
 - E 0.1-10 wt.% of a radical photoinitiator
 - F 0.1-10 wt.% of a cationic photoinitiator

wherein a photo-fabricated article, obtained by repeating the steps of forming a layer of the composition and selectively irradiating the layer of the composition with actinic radiation, followed by postcure during 60 minutes in a postcure apparatus and subsequent conditioning of the article during 48 hours at a temperature of 20 °C and a relative humidity of 80% RH, has at least one of the following properties

- (i) a flexural modulus in the range of 500 to 10000 MPa;
- (ii) an average elongation at break of at least 3%; and
- (iii) a tensile-strenght strength of at least 25 MPa.
- 18. (Previously presented) The radiation curable composition according to claim 17, wherein the composition comprises 30-75 wt% of component B having a glycidyl ether group, 10-25 wt% of component C and 2-15 wt% of the multifunctional acrylate compound D.

- 19. (Cancelled).
- 20. (Original) The composition according to claim 1, wherein the composition contains a filler.
- 21. (Original) A process for forming a three-dimensional article comprising:
 - (1) coating a layer of a composition onto a surface, wherein the composition is used as defined in claim 1;
 - (2) exposing the layer imagewise to actinic radiation to form an imaged cross-section, wherein the radiation is of sufficient intensity to cause substantial curing of the layer in the exposed areas;
 - (3) coating a layer of the composition onto the previously exposed imaged cross-section;
 - (4) exposing said thin layer from step (3) imagewise to actinic radiation to form an additional imaged cross-section, wherein the radiation is of sufficient intensity to cause substantial curing of the thin layer in the exposed areas and to cause adhesion to the previously exposed imaged cross-section;
 - (5) repeating steps (3) and (4) a sufficient number of times in order to build up the three-dimensional article.
- 22. (Original) The process of claim 21, wherein the actinic radiation is in the range of 280-650 nm.
- 23. (Previously presented) The process of claim 21, wherein the exposure energy is in the range of 10-1 50 mJ/cm.
- 24. (Previously presented) A stereolithography resin having the composition of claim 1.
- 25. (Cancelled).

THIES et al Appl. No. 10/623,153 September 11, 2006

- 26. (Cancelled).
- 27. (Previously presented) The radiation curable composition according to claim 1, wherein the amount of component A is 0-20 wt.%.